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Procedures of characterization and calibration for pressure gauges — Part 2: High-pressure gases

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Contents

	P	age
1	Scope ····	1
2	Normative references ·····	1
3	Terms and definitions ·····	1
4 4.1 4.2	Equipment and measuring instrument	2
5	Procedure of characterization ·····	2
6 6.1 6.2 6.3 6.4 6.5 6.6 6.7	Calibration method and uncertainty evaluation of calibration General Selection of calibration method Common requirements for calibration method Calibration method by gas pressure Calibration method of converting liquid pressure into gas pressure Calibration method by liquid pressure (when using one kind of liquid) Calibration method by liquid pressure (when using two kinds of liquid) 1	2 3 3 3 6 1
Annex	x A (normative) Head difference correction and its uncertainty when using pressure medium which is different for standard and calibrated device1	7

B 7547-2:2020

Foreword

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee according to the proposal for establishment of Japanese Industrial Standard submitted by Japan Measuring Instruments Federation (JMIF)/National Institute of Advanced Industrial Science and Technology (AIST)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act. This Standard partially replaces **JIS B 7547**: 2008, which has been withdrawn.

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JIS B 7547 series consists of the following 2 parts under the general title *Procedures of characterization and calibration for pressure gauges*:

JIS B 7547-1 Part 1: General

JIS B 7547-2 Part 2: High-pressure gases

Procedures of characterization and calibration for pressure gauges — Part 2: High-pressure gases

JIS B 7547-2: 2020

1 Scope

This Japanese Industrial Standard specifies the method using a standard calibrated with liquid pressure among procedures of characterization and calibration for pressure gauges for high-pressure gases used as a standard in the calibration, test, inspection, etc. of pressure gauges. The pressure gauge for high-pressure gases does not include the pressure balance.

NOTE High-pressure gases in this Standard generally mean gases with a pressure exceeding 7 MPa.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 7547-1 Procedures of characterization and calibration for pressure gauges
— Part 1: General

JIS B 7610 Pressure balances

JIS Z 8103 Glossary of terms used in measurement

3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS B 7547-1**, **JIS B 7610**, **JIS Z 8103**, and the following apply.

3.1

compressor

device installed for the purpose of increasing gas pressure

It is also called a pressure intensifier or booster.

3.2

liquid lubricated pressure balance

pressure balance with a structure in which developed pressure is added to the liquid tank leading to the clearance between a piston and a cylinder through the hole of a cylinder side face and the clearance between the piston and the cylinder is fulfilled by the liquid (see Figure 1)